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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2292	7590	08/01/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			GOKHALE, SAMEER K	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/735,904

Applicant(s)

LAN, JET

Examiner

Sameer K. Gokhale

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/16/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-7, the phrase "wherein the CRT controller generates a video signal and the video signal is divided into a plurality of equal parts" on line 4-5 of claim 1 renders the claim indefinite because it is unclear what is meant by the term "equal parts" as it is used in the claim because neither the claim or specification make it clear whether the parts being described are equal in terms of their content in addition to their size.

In light of the above rejection based on 35 U.S.C. 112, the following rejections are based on the claims as best understood by the examiner.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-7, and 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Someya et al. (US 5,396,257) (hereafter, "Someya").

Regarding claim 1, Someya teaches a video driving module for multiple monitors, comprising: a CRT controller (Fig. 3, control circuit 2); and a plurality of converters (Fig. 3, converters 5a – 5d); wherein the CRT controller generates a video signal (Fig. 3, see col. 4, lines 64-67, where the control circuit is what is causing the creation of the new video signal shown leaving the frame memory therefore it is generating the video signal) and the video signal is divided into a plurality of equal parts (Fig. 1 and Fig. 3, where if the video signal is divided up among monitors of the same size as shown in Fig. 1, then it is inherent that the video signal sent to converters 4a-4d in Fig. 3 are of equal size), each of the parts being associated with one of the converters (Fig. 3).

Regarding claim 2, Someya teaches a video driving module wherein the CRT controller converts a plurality of parts of the image signal into the plurality of video signals (Fig. 3, where by converting the video signal 10 into the plurality of video signals, the control circuit is inherently converting "a plurality of parts of an image signal").

Regarding claim 3, Someya teaches a video driving module further comprising a video memory to store the image signal (Fig. 3, frame memory 3).

Regarding claim 4, Someya teaches a video driving module wherein each of the video signals is a digital signal (Fig. 3, where A/D converter 1 converts the video signal to a digital signal).

Regarding claim 6, Someya teaches a video driving module wherein the CRT controller generates a vertical/horizontal sync signal to the monitors (Fig. 3, where control circuit is applying the Hsync 11 and Vsync 12 to the signal applied to the monitors).

Regarding claim 7, Someya teaches a video driving module wherein the converter is a digital-to-analog converter (Fig. 3, converters 5a – 5d).

Regarding claim 12, Someya teaches a method for driving multiple monitors, a plurality of monitors (Fig. 3, cores 6a – 6d) being driven by a CRT controller (Fig. 3, control circuit 2) and a plurality of converters (Fig. 3, converters 5a – 5d), the method comprising following steps: the CRT controller processing a plurality of image signals into a plurality of video signals (Fig. 3, see col. 4, lines 64-65, where the control circuit is involved in processing the inputted video signal, which constitutes a plurality of image signals, into a plurality of video signals); sending the plurality of video signals to the plurality of converters for converting the video signals into signals adapted for the monitors (Fig. 3); and sending the signals adapted for the monitors to the monitors (Fig. 3).

Regarding claim 13, Someya teaches a method for driving multiple monitors as in further comprising a step of storing the image signals in a video memory (Fig. 3, frame memory 3).

Regarding claim 14, Someya teaches a method for driving multiple monitors wherein the converters convert the video signals into RGB analog signals (Fig. 3, where the converters 5a- 5d are digital to analog converters and it is inherent that the signals are RGB signals since they are being used for a CRT).

Regarding claim 15, Someya teaches a method for driving multiple monitors wherein the CRT controller generates a vertical/horizontal synchronization signal to the monitors (Fig. 3, where control circuit is applying the Hsync 11 and Vsync 12 to the signal applied to the monitors).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Someya in view of the applicant's disclosed description of the prior art (hereafter, "ADDPA").

Regarding claim 5, Someya teaches the limitations of claim 1 as discussed above, however it does not teach a CRT controller with a graphics engine.

However, the ADDPA does teach a CRT controller with a graphics engine (Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the graphics engine of the ADDPA in the device of Someya in order to generate new graphics to be displayed on the monitors.

Regarding claim 8, Someya teaches a CRT controller (Fig. 3, control circuit 2) for converting image signals into a plurality of video signals (Fig. 3, where the inputted video signal 10 is an image signal and the output of the control circuit and frame memory is a plurality of video signals); and a plurality of converters (Fig. 3, converters 5a – 5d) for converting the video signals into signals adapted for the monitors and outputting the signals to monitors (Fig. 3).

However, Someya does not explicitly teach a motherboard for multiple monitors, comprising: a chipset for outputting a plurality of image signals.

However, the ADDPA does teach a motherboard for multiple monitors, comprising a chipset for outputting a plurality of image signals (Figs. 1-3, see Applicant's specification, para. 3-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of the ADDPA in the device of Someya in order to use the device in a modern computer system.

Regarding claim 9, Someya further teaches that the CRT controller generates a vertical/horizontal synchronization signal to the monitors (Fig. 3, where control circuit is applying the Hsync 11 and Vsync 12 to the signal applied to the monitors).

Regarding claim 10, Someya further teaches that the converter is a digital-to-analog converter (Fig. 3, converters 5a-5d are D/A converters).

Regarding claim 11, Someya further teaches a video memory to store the image signal (Fig. 3, frame memory 3).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tatsumi et al. (US 4,760,388) teaches a single CRT controller for driving a multiple monitor system. Brenner (US 6,870,518) teaches separate D/A converters for a multiple monitor system. Thoma (US 5,038,301) teaches a single CRT controller for driving multiple monitors.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameer K. Gokhale whose telephone number is (571) 272-5553. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.



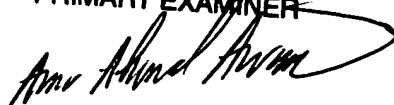
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SKG  
July 24, 2006

Sameer Gokhale  
Examiner  
Art Unit 2629

AMR A. AWAD  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Amr A. Awad', is written over the printed name and title of the primary examiner.